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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/038,327	01/02/2002	Thomas J. Wheeler	0275Y-000388	7251
27572	7590	04/18/2006	EXAMINER	
HARNESS, DICKEY & PIERCE, P.L.C.			DEXTER, CLARK F	
P.O. BOX 828			ART UNIT	
BLOOMFIELD HILLS, MI 48303			PAPER NUMBER	
			3724	

DATE MAILED: 04/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/038,327

Applicant(s)

WHEELER ET AL.

Examiner

Clark F. Dexter

Art Unit

3724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 26-45 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 26-45 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on February 3 2006 has been entered.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 26, 30, 34, 35, 37, 42 and 44 are rejected under 35 U.S.C. 102(b) as being anticipated by Holzer, Jr., pn 5,103,565.

Holzer discloses a support structure (e.g., 12) and a saw blade (e.g., 32) with every structural limitation of the claimed invention including a body adapted for reciprocating engagement with a tool, said body including a cutting portion and a shank portion, said cutting portion having a cutting edge on a first side and a back edge on a second side opposite said first side, said shank portion having a first edge (e.g.,

Art Unit: 3724

including the lower occurrence of 32a) generally extending from said cutting edge, a second edge (e.g., including the upper occurrence of 32a) generally extending from said back edge, and a rear mounting edge generally connecting said first and second edges, a first portion (e.g., the flat part contacted by the lead line of the upper occurrence of 32a) of said second edge being laterally offset from said back edge forming a stepped portion therebetween, a second portion (e.g., the rear angled portion) of said second edge including an angularly disposed edge section (e.g., extending from the upper occurrence of 32a) proximate said rear mounting edge and disposed at an angle relative to said first portion and said cutting edge, said angularly disposed edge section generally defining a reciprocating axis of said saw blade.

It is noted that the recitation “generally defining a reciprocating axis of said saw blade” is considered to be a functional recitation of intended use of the claimed saw blade and support structure, and that the saw blade and support structure of Holzer will meet this limitation if used in a tool that will reciprocate the saw blade and support structure in the claimed manner or otherwise used (e.g., in a hand tool) such that the saw blade and support structure will reciprocate in the claimed manner.

Regarding claim 37, it is noted that a majority of the lateral walls disclosed by Holzer are generally parallel to one another.

4. Claims 26, 30, 34, 35, 37, 42 and 44 are rejected under 35 U.S.C. 102(b) as being anticipated by Langhoff, pn 5,306,025.

Langhoff discloses a support structure (e.g., including 22, 23) and a saw blade (e.g., 4) with every structural limitation of the claimed invention including a body

Art Unit: 3724

adapted for reciprocating engagement with a tool, said body including a cutting portion and a shank portion, said cutting portion having a cutting edge on a first side and a back edge on a second side opposite said first side, said shank portion (e.g., see Fig. 6) having a first edge generally extending from said cutting edge, a second edge generally extending from said back edge, and a rear mounting edge generally connecting said first and second edges, a first portion (e.g., the portion that intersects the opening of the holder) of said second edge being laterally offset from said back edge forming a stepped portion therebetween, a second portion (e.g., the angled upper right portion) of said second edge including an angularly disposed edge section (e.g., at the uppermost end of 14 as shown in Fig. 6) proximate said rear mounting edge (e.g., the curved portion at the top) and disposed at an angle relative to said cutting edge, said angularly disposed edge section generally defining a reciprocating axis of said saw blade.

It is noted that the recitation “generally defining a reciprocating axis of said saw blade” is considered to be a functional recitation of intended use of the claimed saw blade and support structure, and that the saw blade and support structure of Langhoff will meet this limitation if used in a tool that will reciprocate the saw blade and support structure in the claimed manner or otherwise used (e.g., in a hand tool) such that the saw blade and support structure will reciprocate in the claimed manner.

Regarding claim 37, it is noted that a majority of the lateral walls disclosed by Langhoff are generally parallel to one another.

Art Unit: 3724

5. Claim 26, 34-37, 44 and 45 are rejected under 35 U.S.C. 102(b) as being anticipated by Wright, pn 5,433,457.

Wright discloses a support structure (e.g., including 88, 32 as well as unmarked features) and a saw blade (e.g., 50, 150, 302) with every structural limitation of the claimed invention including a body adapted for reciprocating engagement with a tool, said body including a cutting portion and a shank portion, said cutting portion having a cutting edge on a first side and a back edge on a second side opposite said first side, said shank portion (e.g., see Fig. 6) having a first edge generally extending from said cutting edge, a second edge generally extending from said back edge, and a rear mounting edge generally connecting said first and second edges, a first portion (e.g., at 60, 62) of said second edge being laterally offset from said back edge forming a stepped portion therebetween, a second portion of said second edge including an angularly disposed edge section (e.g., 64) proximate said rear mounting edge (e.g., it is proximate to the rear mounting edge relative to the relationship between feature 61 or 63 and the rear mounting edge) and disposed at an angle relative to said first portion and said cutting edge, said angularly disposed edge section generally defining a reciprocating axis of said saw blade.

It is noted that the recitation “generally defining a reciprocating axis of said saw blade” is considered to be a functional recitation of intended use of the claimed saw blade and support structure, and that the saw blade and support structure of Wright will meet this limitation if used in a tool that will reciprocate the saw blade and support

Art Unit: 3724

structure in the claimed manner or otherwise used (e.g., in a hand tool) such that the saw blade and support structure will reciprocate in the claimed manner.

Regarding claim 37, it is noted that a majority of the lateral walls disclosed by Wright are generally parallel to one another.

6. Claims 26, 27, 30-33 and 35 are rejected under 35 U.S.C. 102(b) as being anticipated by Atkinson et al., pn 3,033,251

Atkinson discloses a saw blade (e.g., 110, see Figs. 5 and 8) with every structural limitation of the claimed invention including a body adapted for reciprocating engagement with a tool, said body including a cutting portion and a shank portion, said cutting portion having a cutting edge (e.g., 114) on a first side and a back edge (e.g., 113) on a second side opposite said first side, said shank portion (e.g., see Fig. 5) having a first edge (e.g., the bottom edge in Fig. 5) generally extending from said cutting edge, a second edge (e.g., the top edge in Fig. 5) generally extending from said back edge, and a rear mounting edge (e.g., the U-shaped edge) generally connecting said first and second edges, a first portion (e.g., the downwardly-sloping upper edge) of said second edge being laterally offset from said back edge forming a stepped portion therebetween, a second portion (e.g., the portion between the downwardly-sloping upper edge and the U-shaped edge) of said second edge including an angularly disposed edge section (e.g., at least the top right edge portion of the shank portion as viewed in Fig. 5) proximate said rear mounting edge and disposed at an angle relative to said first portion and said cutting edge, said angularly disposed edge section generally defining a reciprocating axis of said saw blade.

It is noted that the recitation "generally defining a reciprocating axis of said saw blade" is considered to be a functional recitation of intended use of the claimed saw blade and support structure, and that the saw blade and support structure of Atkinson will meet this limitation if used in a tool that will reciprocate the saw blade and support structure in the claimed manner or otherwise used (e.g., in a hand tool) such that the saw blade and support structure will reciprocate in the claimed manner.

7. Claims 26-28 and 30 are rejected under 35 U.S.C. 102(b) as being anticipated by Beale, pn 3,977,287.

Beale discloses a saw blade with every structural limitation of the claimed invention including a body adapted for reciprocating engagement with a tool, said body including a cutting portion and a shank portion, said cutting portion having a cutting edge (e.g., 46) on a first side and a back edge (e.g., 44) on a second side opposite said first side, said shank portion having a first edge (e.g., the right edge in Fig. 2) generally extending from said cutting edge, a second edge (e.g., the left edge in Fig. 2) generally extending from said back edge, and a rear mounting edge generally connecting said first and second edges, a first portion (e.g., the vertical left-most portion) of said second edge being laterally offset from said back edge forming a stepped portion therebetween, a second portion (e.g., the angled upper left portion) of said second edge including an angularly disposed edge section (e.g., the angled edge on either the top left or bottom left of the wider part of the shank portion as viewed in Fig. 2) proximate said rear mounting edge and disposed at an angle relative to said first portion and said cutting edge, said angularly disposed edge section generally defining a reciprocating axis of



Art Unit: 3724

said saw blade, and wherein the shank portion includes an aperture with a flat rear edge (e.g., at 38).

It is noted that the recitation “generally defining a reciprocating axis of said saw blade” is considered to be a functional recitation of intended use of the claimed saw blade and support structure, and that the saw blade and support structure of Beale will meet this limitation if used in a tool that will reciprocate the saw blade and support structure in the claimed manner or otherwise used (e.g., in a hand tool) such that the saw blade and support structure will reciprocate in the claimed manner.

### ***Claim Rejections - 35 USC § 102/103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35

Art Unit: 3724

U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claim 32 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Langhoff, pn 5,306,025.

Langhoff discloses a saw blade (e.g., 4) with every structural limitation of the claimed invention including an angularly disposed edge section and a mounting edge perpendicular thereto (e.g., at the uppermost end of 14 as shown in Figure 6).

In the alternative, if it is argued that Langhoff does not disclose a mounting edge perpendicular to the angularly disposed edge section as claimed, the Examiner's position is that to make the angularly disposed edge and the mounting edge perpendicular to one another would be the mere discovery of the optimum or workable ranges within the general conditions of the prior art by routine experimentation and therefore obvious to one having ordinary skill in the art.

### ***Claim Rejections - 35 USC § 103***

10. Claims 27, 28, 39 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holzer, Jr., pn 5,103,565 in view of Tseng, pn 5,664,792.

Holzer discloses a saw blade (e.g., 32) with almost every structural limitation of the claimed invention but lacks the shank portion having an aperture with a flat rear edge. However, the Examiner takes Official notice that such apertures are old and well known in the art and provide various known benefits including facilitating mounting and dismounting of the saw blade. Tseng discloses one example of such an aperture.

Art Unit: 3724

Therefore, it would have been obvious to one having ordinary skill in the art to provide such an aperture on the saw blade of Holzer for the well known benefits including that described above.

11. Claims 27, 28, 39 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Langhoff, pn 5,306,025 in view of Tseng, pn 5,664,792.

Langhoff discloses a saw blade (e.g., 4) with almost every structural limitation of the claimed invention but lacks the shank portion having an aperture with a flat rear edge. However, the Examiner takes Official notice that such apertures are old and well known in the art and provide various known benefits including facilitating mounting and dismounting of the saw blade. Tseng discloses one example of such an aperture.

Therefore, it would have been obvious to one having ordinary skill in the art to provide such an aperture on the saw blade of Langhoff for the well known benefits including that described above.

12. Claims 27, 28, 39 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wright, pn 5,433,457 in view of Tseng, pn 5,664,792.

Wright discloses a saw blade (e.g., 50, 150, 302) with almost every structural limitation of the claimed invention but lacks the shank portion having an aperture with a flat rear edge. However, the Examiner takes Official notice that such apertures are old and well known in the art and provide various known benefits including facilitating mounting and dismounting of the saw blade. Tseng discloses one example of such an aperture. Therefore, it would have been obvious to one having ordinary skill in the art to

Art Unit: 3724

provide such an aperture on the saw blade of Wright for the well known benefits including that described above.

13. Claims 28 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Atkinson et al., pn 3,033,251 in view of Tseng, pn 5,664,792.

Atkinson discloses a saw blade (e.g., 110; see Fig. 5) with almost every structural limitation of the claimed invention including an aperture (e.g., 116) that extends parallel to the angularly disposed edge, but lacks the aperture having a flat rear edge. However, the Examiner takes Official notice that such apertures are old and well known in the art and provide various known benefits including facilitating mounting and dismounting of the saw blade. Tseng discloses one example of such an aperture, wherein such an aperture configuration is provided to take advantage of tool fixing mechanisms such as that disclosed by Tseng. Therefore, it would have been obvious to one having ordinary skill in the art to provide such an aperture on the saw blade of Atkinson for the well known benefits including that described above. It is noted that modifying the aperture (e.g., 116) of Atkinson by providing a flat rear edge such as that taught by Tseng would result in that flat rear edge being perpendicular to the side walls of the aperture and thus perpendicular to the angularly disposed edge of Atkinson.

14. Claims 37-39, 42 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Atkinson et al., pn 3,033,251 in view of Holzer, Jr., pn 5,103,565.

Atkinson discloses a saw blade (e.g., 110, see Figs. 5 and 8) with almost every structural limitation of the claimed invention including a support structure, a recess (e.g., 116, claim 38) and a stop (e.g., 19, claim 38), and an aperture (e.g., 116, claim 39), but

Art Unit: 3724

lacks the specifics of the support structure including two lateral walls and a base portion. However, such structure is old and well known in the art and has various well known benefits including facilitating mounting and dismounting of the saw blade. As one example, Holzer discloses examples of such support structure. Therefore, it would have been obvious to one having ordinary skill in the art to provide such a support structure along with the saw blade of Atkinson for the well known benefits including those described above.

15. Claims 40 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Atkinson et al., pn 3,033,251 in view of Holzer, Jr., pn 5,103,565 as applied to claims 37 and 39 above, and further in view of Tseng, pn 5,664,792.

The combination teaches and/or suggests a saw blade with almost every structural limitation of the claimed invention as described above, but lacks the aperture having a flat rear edge. However, such apertures are old and well known in the art and provide various known benefits including facilitating mounting and dismounting of the saw blade. Tseng discloses one example of such an aperture, wherein such an aperture configuration is provided to take advantage of tool fixing mechanisms such as that disclosed by Tseng. Therefore, it would have been obvious to one having ordinary skill in the art to provide such an aperture on the saw blade of Atkinson for the well known benefits including that described above. It is noted that modifying the aperture (e.g., 116) of Atkinson by providing a flat rear edge such as that taught by Tseng would

result in that flat rear edge being perpendicular to the side walls of the aperture and thus perpendicular to the angularly disposed edge of Atkinson.

### ***Response to Arguments***

16. Applicant's arguments filed February 3, 2006 have been fully considered but they are not persuasive.

In the third paragraph on page 9 of the response, applicant argues that "there is no known existing statutory law or caselaw permitting the Examiner to disregard functional language in a claim when making a rejection. Courts have actually held functional language to be allowable and even necessary at times."

The Examiner agrees with applicant's statement regarding functional language. In fact, it is respectfully submitted that the Examiner has not disregarded the language at all as evidenced by the statement directed thereto in each of the pertinent rejections. However, functional language can only be considered with regard to the structure implied thereby. Functional language does not act to convert an apparatus claim to a method/process claim, and the Examiner is only permitted to consider such language in terms of the structure implied thereby. In the instant rejections, there is no clear structure implied by this language. Further, it is respectfully submitted that applicant has not specified what disclosed structure is implied by this language, and thus what structure is lacking in the prior art. Rather, it appears that applicant is arguing that the saw blades relied upon in the rejections are not used in the manner as described in the claim, and as is well settled patent law, a functional recitation of intended use, wherein

Art Unit: 3724

no structure is implied thereby, cannot be relied upon to distinguish over the prior art in apparatus/device claims.

Further, applicant argues that the various angular surfaces in the prior art do not define a reciprocating axis for the blade. Again, it is respectfully submitted that this limitation is merely defining an intended use of the blade without implying or otherwise defining structure. The blades of the prior art are fully capable of being reciprocated along the recited axis as well as any axis. It is emphasized that the claims do not define structure to reciprocate the blade in the claimed manner, and therefore, the blade is not limited by any claimed structure to being reciprocated along any one axis. In other words, the blades of the prior art may be rotated, or reciprocated in any direction. For example, a person can hold any one of the blades in his/her hand, or both hands, and move the blade in any desired manner. It is still a blade that is being claimed per se (claim 26), or a blade and holder that is being claimed (claim 37).

### Remarks

17. Applicant is welcome to contact the Examiner to further discuss any outstanding issues as well as propose/explore ways to distinguish the claimed invention over the prior art.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clark F. Dexter whose telephone number is (571)272-

Art Unit: 3724

4505. The examiner can normally be reached on Mondays, Tuesdays, Thursdays and Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allan N. Shoap can be reached on (571)272-4514. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**Clark F. Dexter**  
**Primary Examiner**  
**Art Unit 3724**

cf  
April 12, 2006